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REMARKS/ARGUMENTS

In the Office Action of August 3, 2006, claim 12 was rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. More specifically, the Examiner has taken the position that it is unclear what is meant by "an intended" operating pressure. Applicant has amended claim 12 to recite, in part: "approximately twice the operating pressure of the fuel cell." It is believed that the amendment is fully responsive to the rejection and withdrawal of the rejection is respectfully requested.

Claims 1-3, 10 and 13-14 were rejected under 35 U.S.C. 102(e) as being anticipated by Condit et al (U.S. 6,635,370). However, claim 1 as now amended makes it clear that Applicant's claimed method calling for a first test is conducted outside of a test chamber. None of the references of record, including Condit et al recognize that a gas mixture, including an inert gas and a fuel, supplied to the anode side of the fuel cell system wherein the proportion of said fuel present in said mixture lies below the value at which said mixture is flammable in air could be utilized to test a fuel cell system without the need for a test chamber. The Examiner's attention is respectfully directed to the instant application in paragraphs 0003-0004 which describe the need for testing chambers for carrying out tests on fuel cell systems using hydrogen. Such tests are conducted in testing chambers equipped with ventilation systems which operate with a high throughput of air. Various hydrogen detectors and also additional switch-off devices are required in order to detect any hydrogen leaks and, in the event of a leak, to switch off the test chamber and also the entire installation therein. Moreover, all electrical systems which are to be found in the testing chamber must be particularly protected against spark formation in order to

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prevent hydrogen ignition. Such testing chambers are also equipped with a blow-out wall in the event of hydrogen ignition.

Condit et al does not identically disclose claim 1 as amended. Furthermore, the Examiner's attention is respectfully directed to claim 3 which recites "wherein the mixture comprises substantially 95% N₂ and 5% H₂." Condit et al teaches that the hydrogen may be present in an amount less than 4%. As such, Condit et al teaches away from Applicant's claim 3. Accordingly, withdrawal of the rejection of claim 3 is respectfully requested.

Claims 1, 7-8, 10, 13-15, 22-25 and 44-45 were rejected under 35 U.S.C. 102(e) as being anticipated by Bailey et al (U.S. 6,638,650). However, Bailey fails to suggest a method, including a first test being carried out with a mixture of at least one inert gas with a fuel and wherein the "portion of said fuel present in said mixture lies below a value at which the mixture is flammable in air." Nor does Bailey suggest "wherein said tests are conducted outside a test chamber" as now recited in amended claim 1. Withdrawal of the rejection under 35 U.S.C. 102 is respectfully requested.

Claims 4-5 and 11-12 were rejected under 35 U.S.C. 103(a) as being unpatentable over Bailey et al (U.S. 6,638,650), as applied to claims 1, 8, 10, 13-15, 22-25 and 44-45 above and further in view of Knights et al (U.S. 6,492,043). The Examiner acknowledges that Bailey et al does not disclose the method of investigation of a fuel cell system including a first test being carried out in an environment with a normal air atmosphere, an environment with normal ventilation. The Examiner, however, takes the position that Knights et al discloses that in order to detect external leaks between a fuel cell fluid passage and the external environment, the monitored environment may be the surrounding environment outside the fuel cell (column 8, lines 24-26). However, neither Bailey nor Knights, individually or in combination, suggest that the proportion of the fuel

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present in the mixture supplied to the anode side of the fuel cell system should lie below the value at which the mixture is flammable in air, nor do Bailey or Knights suggest that the tests may be conducted outside of a test chamber, as recited in claim 1, from which claims 4-5 and 11-12 depend. The Examiner's attention is respectfully directed to Knights et al Figure 6 and column 13, lines 17-20 which teach that the fuel cell stack should be enclosed inside of a chamber and under a vacuum. As such, Knights et al actually teaches away from Applicant's claimed invention. Withdrawal of the rejection is respectfully requested.

Claims 6-7, 9, 18-21, 30-32 and 46 were rejected under 35 U.S.C. 103(a) as being unpatentable over Condit et al (U.S. 6,635,370) as applied to claims 1-3, 10 and 13-14 above, or over Bailey et al (U.S. 6,638,650) as applied to claims 1, 8, 10, 13-15, 22-25 and 44-45 above. With respect to claim 6, neither Condit et al nor Bailey et al disclose that the amount of fuel in the mixture supplied to the anode should be present in an amount such that the mixture lies below the value at which the mixture is flammable in air so that the tests can be conducted outside of a test chamber. Consequently, as recited in claim 6, such an arrangement allows for at least one of the tests a), b), c) or d) to be carried out during the manufacture of a vehicle in order to test operability of the vehicle at time of manufacture. Because no special test chamber is required, such a test can be conducted in the manufacturing plant and by laborers that do not have a formal education. Dependent claims 7, 9, 18-21, 30-32 and 46 are believed to be patentable on the same basis as independent claim 1. Withdrawal of the rejection is respectfully requested.

Claims 16-17 were rejected under 35 U.S.C. 103(a) as being unpatentable over Condit et al (U.S. 6,635,370) as applied to claims 1-3, 10 and 13-14 above or over Bailey et al (U.S. 6,638,650) as applied to claims 1, 8, 10, 13-15, 22-25 and 44-45 above and

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further in view of Tomimatsu et al (U.S. 5,595,832). Neither Condit et al, Bailey et al nor Tomimatsu et al suggest a method of investigating a fuel cell system including a first test being carried out with a mixture of at least one inert gas and a fuel and wherein the mixture is supplied to the anode side of the fuel cell system such that the proportion of the fuel present in the mixture lies below the value at which the mixture is flammable in air or that such test should be conducted outside of a test chamber as recited in independent claim 1, from which claims 16-17 depend. Withdrawal of the rejection is respectfully requested.

Claim 33 has been rejected under 35 U.S.C. 103(a) as being unpatentable over Condit et al (U.S. 6,635,370), as applied to claims 1-3, 10 and 13-14 above, or over Bailey et al (U.S. 6,638,650), as applied to claims 1, 8, 10, 13-15, 22-25 and 44-45 above, and further in view of Meltser et al (U.S. 5,763,113). However, neither Condit et al, Bailey et al nor Meltser et al, individually or in combination, suggest a method of investigating a fuel cell system including a first test being carried out with a mixture of at least one inert gas and a fuel wherein the mixture is supplied to the anode side of the fuel cell system and the amount of fuel in the mixture is such that the mixture lies below the value at which the mixture is flammable in air and wherein the tests are conducted outside of a test chamber as recited in claim 33. The Examiner's attention is respectfully directed to Meltser et al column 3, line 65 – column 4, line 2, wherein Meltser et al teach a cathode flow channel being provided adjacent the cathode for flowing oxygen-rich gas (i.e., preferably air) by and into contact with the cathode, and similarly an anode flow channel provided adjacent the anode for flowing hydrogen fuel by and into contact with the anode. Because Meltser et al makes a distinction with respect to the oxidant as being oxygen-rich, but no such distinction is made with respect to the hydrogen fuel, the inference a person of ordinary

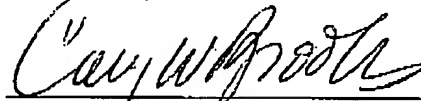
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skill in the art would draw from the reference is that pure hydrogen is supplied to the anode. As such, Meltser et al actually teaches away from Applicant's claimed invention.

In view of the above amendments and remarks, Applicant respectfully requests reconsideration and allowance of the claims now in the case.

If it is determined that any fees are due with this submission, the Commissioner is hereby authorized and respectfully requested to charge such fees to Deposit Account No. 07-0960.

Respectfully submitted,



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